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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,544	03/12/2004	Luigi Marton	1719-79	6475

7590

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EXAMINER

MCCULLOUGH, MICHAEL C

ART UNIT

PAPER NUMBER

3653

DATE MAILED: 11/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/798,544

Applicant(s)

MARTON, LUIGI

Examiner

Michael C. McCullough

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                        |                                                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>19 July 2004</u> .                                            | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 10 recites the limitation "a sufficient depression value" in line 3. There is insufficient antecedent basis for this limitation in the claim.
3. Claim 11 recites the limitation "the lower chamber of the shaft and the upper chamber of the piston" in lines 2 and 3. There is insufficient antecedent basis for this limitation in the claim.
4. Claim 12 recites the limitation "a substantial loss of adherence" in line 3. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3-6, and 9-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Kumar (US 4,950,016). Kumar discloses a sucker (column 2 line 30), vacuum forming means by means of Venturi effect (column 1 lines 25-26), three commutators (Figure 1 element 70 and Figure 4 elements 141 and 251), vacuum generation means supplied to every sucker (column 2 lines 27-30), an auto-selection valve comprised of two commutators (Figure 4 elements 141 and 251), depression in the circuit maintains

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auto-relief (column 7 lines 30-48), an eddy forming auto-relief circuit (column 7 lines 30-48), auto-relief function is activated when the vacuum has reached a sufficient depression value (column 7 lines 30-48), a connection between a lower chamber of a shaft and an upper chamber of a piston (column 2 lines 44-58), if the sucker detaches the vacuum generator is automatically interrupted (column 7 lines 14-48), during a depression re-activation phase the circuit depression value returns to the maximum (column 7 lines 30-48), and during a detachment phase higher air pressure flow is applied directly to the sucker (column 8 line 61 through column 9 line 31).

7. Claim 5 has limitations that are contingent on the device in the case of activation. Therefore, if the device never enters activation it is not limited by the elements.

8. Claim 13 has limitations that are contingent on the device entering a stand-by phase. Therefore, if the device never enters a stand-by phase it is not limited by the elements.

9. Claim 14 has limitations that are contingent on the device entering a loss of depression phase. Therefore, if the device never enters a loss of depression phase it is not limited by the elements.

10. Claim 15 has limitations that are contingent on the device entering a depression re-activation phase. Therefore, if the device never enters a depression re-activation phase it is not limited by the elements.

11. Claim 16 has limitations that are contingent on the device entering a detachment phase. Therefore, if the device never enters a detachment phase it is not limited by the elements.

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar (US 4,950,016) in view of Kumar (US 4,750,768). Kumar (US 4,950,016) discloses all limitations of claim 1 and farther discloses a relief valve (column 6 lines 8-12) and an alternative valve (column 1 lines 56-58) but does not disclose pressure regulators and valves. However, Kumar (US 4,750,768) discloses a similar device that includes pressure regulators (Figure 1 elements 5-7 and Figure 2 elements 122 and 151) for the purpose of supplying airflow at a lower pressure (column 3 lines 37-41) and valves (column 2 lines 18-44) for the purpose of restricting flow to the Venturi (column 2 lines 18-44). It would have been obvious for a person of ordinary skill in the art at the time of the applicant's invention to modify Kumar (US 4,950,016) by utilizing pressure regulators and valves, as disclosed by Kumar (US 4,750,768), for the purpose of supplying lower pressure and restricting flow to the Venturi.

14. Claims 7 and 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar (US 4,950,016) in view of Bihler (US 4,167,239). Kumar discloses two commutators that are more rigid than a third (column 7 lines 30-48) but does not disclose a more rigid spring. However, Bihler discloses a similar device that includes a spring (column 3 lines 31-50) for the purpose of allowing a valve to be open while

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another valve is closed when both valves see the same pressure (column 3 lines 31-50). It would have been obvious for a person of ordinary skill in the art at the time of the applicant's invention to modify Kumar by utilizing a spring valve, as disclosed by Bihler, for the purpose of allowing a valve to be open while another valve is closed when both valves see the same pressure.

15. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar (US 4,950,016) in view of Kumar (US 4,750,768). Kumar (US 4,950,016) discloses all limitations of the claims but does not disclose a vacuum pump. However, Kumar (US 4,750,768) discloses a similar device that includes a vacuum pump (column 1 lines 8-10) for the purpose of picking up an object (column 1 lines 10-13). It would have been obvious for a person of ordinary skill in the art at the time of the applicant's invention to modify Kumar (US 4,950,016) by utilizing a vacuum pump, as disclosed by Kumar (US 4,750,768), for the purpose of picking up an object.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. McCullough whose telephone number is (571) 272-7805. The examiner can normally be reached on Monday-Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MCM



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